Mackenbach et al (1987) sent out sets of case histories to samples of doctors in member countries of the European Community. Their paper concerns 6 histories in which COPD was the cause of death and 5 in which cancer was. For both COPD and cancer, after certification and coding by national coding offices, an average 83% of all cases received a correct underlying cause of death code. Errors were due to (i) a false diagnosis in part I of the certificate, (ii) no diagnosis mentioned on the certificate, only signs and symptoms or complications, (iii) the correct diagnosis on the certificate but in part II, and (iv) the correct diagnosis in part I but in a wrong sequence. Some differences in certification practices between countries were compensated for in the process of coding. The authors concluded that their overall results "suggest that differences in certification and coding could in some cases be an important determinant of international mortality differences by cause of death".

3.3 Effect of diagnostic error on lung cancer trends

Gilliam (1955) compared trends in US lung cancer rates observed over the period 1914 to 1950 with those that would have been observed had a proportion of deaths classified as being due to tuberculosis or to "other respiratory diseases" actually been due to lung cancer. Although Gilliam noted that differing age/sex-specific trends were not consistent with the whole of the rise in recorded lung cancer rates being an artefact due to past underdiagnosis, he suggests that a substantial proportion of the increase is due to this reason. He regarded it not unreasonable to believe that 2% of

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deaths in persons 35 years of age and older that were attributed to "other respiratory diseases" were in fact due to cancer of the lung. If this assumption is correct, it would indicate that the recorded increase in white males since 1914 should be 4-fold and not 26-fold, while the 7-fold increase in females would be reduced to 30 per cent.

The 1977 Report of the Royal College of Physicians (RCP, 1977), in its chapter on lung cancer, contained a discussion on reasons for the rise in recorded lung cancer rates in England and Wales between 1913 and 1973. They noted that "developments in diagnoses took place mostly between 1920 and 1950, with increasing use of chest radiology, bronchoscopy and cytology, and referral of patients to hospital for diagnoses", but that "little" change had occurred over the next 25 years. "Before 1855 very few women aged 65 to 69 had ever smoked cigarettes but between 1916 and 1955 there was a tenfold increase in female lung cancer deaths in this age range ... presumably due chiefly to better diagnosis. This effect would probably have been rather smaller in young patients. If we assume an eight-fold contribution to the increase in the male deaths at ages 35 to 64, the true increase over this period would not have been the reported thirty-fold but probably more like four-fold."

3.4 Differences between clinical and death certificate diagnosis

McKenzie (1965) sent a questionnaire from the General Register Office to the certifying medical practitioner in respect of every second death ascribed to cancer of the lung or bronchus in January 1955. From 770 inquiries, 654 replies were received. In 20 cases

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confirmatory procedures had not been adopted to check the diagnosis. Of the remaining 634, the certification of lung cancer was not supported in 18 - in 8 the lung was not carcinomatous and in 10 it was secondary to a primary elsewhere.

Bonser and Thomas (1959) obtained death certificates for 1036 deaths recorded in Leeds in 1950-54 and coded as cancer of the trachea, pleura, lungs or bronchi, and traced the clinical records of all but 37. Of the remaining 999, 35 were incorrectly certified - 9 were not cancer at all, 3 were cancer of another site without lung metastasis and 23 were cancer of another site with lung metastasis. Many of these errors related to not taking autopsy information into account, perhaps because the certificate was issued before the autopsy was done. Autopsies had been carried out for 294 of the patients with a death certificate diagnosis of lung cancer (etc.). In 169 it confirmed the clinical diagnosis, in 98 it revealed the condition for the first time, and in 27 it demonstrated that the death certificate had been incorrect.

The authors also obtained the clinical notes of 879 cases of lung cancer (etc.) recorded in the admission index of the two main hospitals in Leeds over the same period and compared their death certificate diagnosis. 66 (7.5%) were either not certified or not coded as cancer of the lung, although 44 were proved at autopsy and the other 22 were judged clinically to be certainly due to this cause.

Barclay and Phillips (1962) studied 7146 Saskatchewan deaths during the period 1950-56 for which cancer was a primary or contributory cause on the death certificate. For 812 of these the

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diagnosis was not confirmed from hospital or cancer registry records (11.4% overdiagnosis). There were an additional 1162 decedents where cancer was known to be present but it did not appear on the death certificate (14.0% underdiagnosis). For lung cancer the percentages were 13.6% (96/708) overdiagnosis and 2.7% (20/728) underdiagnosis.

Alderson and Meade (1967), based on 1216 deaths in Oxford in 1962, studied the frequency with which death certificates disagreed with hospital diagnoses. For 269 patients with an underlying cause of death of malignant neoplasm according to the hospital records, 11% were coded differently on the death certificate. For all 1216 deaths diagnoses were in error 43% of the time. The 43% error rate was rather higher in older patients (80-89 52% than in younger patients 0-59 35%). The records of 105 were examined in greater detail independently. Errors in the hospital diagnosis were present for 14 (13%) and in the death certificate for 23 (22%). In only 39 out of 105 did the 3 assessments completely agree.

Based on computer linkage of death records and hospital discharge abstracts, Gittelsohn and Senning (1979) compared cause of death and discharge diagnoses in 9,724 Vermont hospital deaths occurring in 1969-1975. Comparing the underlying cause of death with the closest hospital record, 72% were found to agree on 3 digit ICD code and 10% on 2 digit code. Concordance was found to decline by patient age and length of hospital stay and to vary significantly by hospital of death and cause. Of 1557 cases with a neoplasm coded as the underlying cause of death, 77% had a hospital record

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diagnosis referring to the same specific site, 21% a diagnosis of neoplasm of a different site, and 2% had no hospital diagnosis of neoplasm. Of 511 cases coded as dying of lung cancer, 11% had a hospital record diagnosis referring to cancer at a different site and 2% had no hospital diagnosis of any neoplasm. Detailed tabulations are presented for many other dieases.

Based on deaths occurring in the Third National Cancer Survey in 1970 and 1971, Percy et al (1981) compared the site of cancer in 48,826 cases where the death certificate had an underlying cause of death of cancer and the hospital diagnosis was of a single primary cancer. Using a 30-site grouping of the cancers, 13.3 per cent had a different site reported on the hospital diagnosis than that indicated by the death certificate. Using a 49-site grouping, the disagreement rate rose to 17.3%. Of 10,178 deaths with cancer of the trachea, lung or bronchus as the cause of death, 618 did not have this site indicated in the hospital diagnosis. In addition there were a further 499 where cancer of the lung (etc.) was the hospital diagnosis but did not appear as the cause of death on the certificate. The paper gives full details of which other cancers were involved for disagreements involving lung cancer, and also for all disagreements involving other cancers.

3.5 Lung cancer as an underlying or contributory cause on death certificates

Sterling et al (1992) analysed a sample of death certificates from the 1986 National Mortality Followback Survey, and from the 1954-62 Dorn Study, a follow-up study of approximately 250,000

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holders of US Veterans Life Insurance. Both data sets include information on the smoking habits of decedents and on the underlying and contributory causes of death. Of 235 death certificates among lifelong never smokers, lung cancer was classified as a contributory cause in 62 (26.4%). In contrast, among the 2475 death certificates among current or former smokers, lung cancer was classified as a contributory cause in 232 (9.4%). No similar pattern related to smoking was seen for other major causes of death. The authors also noted that where lung cancer is present as a contributory cause, other cancer is much more likely to be present as the underlying cause if the subject had never smoked. The authors concluded that their results "provided evidence of a possible bias because knowledge of a decedent's smoking status appears to influence the designation of lung cancer or some other cancer as the underlying cause or a contributing cause of death. To some extent the biases found in this study multiply with those reported by McFarlane et al (1986) and by Wells and Feinstein (1988). Thus a non-smoker is less likely to have a lung cancer diagnosed in life, and when it is diagnosed, it is less likely to be classified as an underlying cause of death.

4. REFERENCES

Papers included in this note

Adelstein AM (1978) Death certification and epidemiological research [Letter]. Br Med J, 2,1229-30.

Ahronheim JC, Bernholc AS and Clark WD (1983) Age trends in autopsy rates. Striking decline in late life. JAMA, 250,1182-6.

2028470508

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Alderson MR and Meade TW (1967) Accuracy of diagnosis on death certificates compared with that in hospital records. Br J Prev Soc Med, 21,22-9.

Alderson MR, Bayliss RIS, Clarke CA and Whitfield AGW (1983) Death certification. Br Med J, 287,444-5.

Anderson RE (1984) The autopsy as an instrument of quality assessment. Classification of premortem and postmortem diagnostic discrepancies. Arch Pathol Lab Med, 108,490-3.

Angrist A (1958) Certified cause of death: analysis and recommendations. JAMA, 166,2148.

Asnaes S, Frederiksen V and Fenger C (1983) The value of the hospital autopsy. A study of causes and modes of death estimated before and after autopsy. Foresensic Science International, 21,23-32.

Barclay THC and Phillips AJ (1962) The accuracy of cancer diagnosis on death certificates. Cancer, 15,5-9.

Battle RM, Pathak D et al (1987) Factors influencing discrepancies between premortem and postmortem diagnoses. JAMA, 258,339-44.

Bauer FW and Robbins SL (1972) An autopsy study of cancer patients. I. Accuracy of the clinical diagnoses (1955 to 1965) Boston City Hospital. JAMA, 221,1471-4.

Bonser GM and Thomas GM (1959) An investigation of the validity of death certification of cancer of the lung in Leeds. Br J Cancer, 13,1-12.

Britton M (1974) Clinical diagnostics; experience from 383 autopsied cases. Acta Med Scand, 196,211-9.

Britton M (1974) Diagnostic errors discovered at autopsy. Acta Med Scand, 196,203-10.

Cameron HM and McGoogan E (1981) A prospective study of 1152 hospital autopsies: II. Analysis of inaccuracies in clinical diagnoses and their significance. J Pathol, 133,285-300.

Cechner RL, Chamberlain W et al (1980) Misdiagnosis of bronchogenic carcinoma - the role of cigarette smoking, surveillance bias, and other factors. Cancer, 46,190-9.

Diehl AK and Gau DW (1982) Death certification by British doctors: a demographic analysis. J Epidemiol Community Health, 36,146-9.

Engel LW, Strauchen JA, Chiazze L Jr and Heid M (1980) Accuracy of death certification in an autopsied population with specific attention to malignant neoplasms and vascular diseases. Am J Epidemiol, 111,99-111.

2028470509

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Frederici HR and Sebastian M (1984) Autopsies in a modern teaching hospital: a review of 2,537 cases. Arch Pathol Lab Med, 108,518-21.

French TA, Fletcher PJH and Ockenden BG (1978) Death certification and epidemiological research [Letter]. Br Med J, 2,1230.

Gilliam AG (1955) Trends of mortality attributed to carcinoma of the lung: possible effects of faulty certification of deaths to other respiratory diseases. Cancer, 8,1130-6.

Gittelsohn A and Senning J (1979) Studies on the reliability of vital and health records: I. comparison of cause of death and hospital record diagnosis. Am J Public Health, 69,680-9.

Gobbato F, Vecchiet F et al (1982) Inaccuracy of death certificate diagnoses in malignancy. An analysis of 1,405 autopsied cases. Hum Pathol, 13,1036-8.

Goldman L, Sayson R et al (1983) The value of the autopsy in three medical eras. N Engl J Med, 308,1000-5.

Gruver RH and Freis ED (1957) A study of diagnostic errors. Ann Intern Med, 47,108-20.

Guptill CS (1976) How autopsy data are biased by age factors. Geriatrics, July,78-82.

Gwynne JF (1965) Fallacies in cancer mortality statistics. NZ Med J, 64,146-51.

Hartveit F (1977) Clinical and post-mortem assessment of the cause of death. J Pathol, 123,193-210.

Heasman MA and Lipworth L (1966) Accuracy of certification of cause of death. General Register Office, Studies on medical and population subjects No. 20. HMSO, London.

Jimenez F, Teng P and Rosenblatt MB (1975) Cancer of the lung in males. Bull N Y Acad Med, 51,432-8.

Karolyi G and Karolyi P (1991) Value of mortality data and necropsy records in monitoring morbidity in a population. J Epidemiol Community Health, 45,238-43.

Karsner HT, Rothschild L and Crump ES (1919) Clinical diagnosis as compared with necropsy findings. JAMA, 73,666-9.

Kennaway NM and Kennaway EL (1936) A study of the incidence of cancer of the lung and larynx. J Hyg, 36,236-67.

Kircher T, Nelson J and Burdo M (1985) The autopsy as a measure of accuracy of the death certificate. N Engl J Med, 313,1263-9.

2028470510

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Knight B (1986) The cause of death. J R Soc Med, 79,191-2.

Mackenbach J, Van Duyne WMJ and Kelson MC (1987) Certification and coding of two underlying causes of death in the Netherlands and other countries of the European Community. J Epidemiol Community Health, 41,156-60.

McFarlane MJ, Feinstein AR and Wells CK (1986) Necropsy evidence of detection bias in the diagnosis of lung cancer. Arch Intern Med, 146,1695-8.

McFarlane MJ (1987) Absence of demographic bias in selection for necropsy. Arch Pathol Lab Med, 111,67-70.

McKenzie A (1956) Br Med J, 2,204.

Mollo F, Bertoldo E, Grandi G and Cavallo F (1986) Reliability of death certifications for different types of cancer. An autopsy survey. Path Res Pract, 181,442-7.

Munck W (1951) Autopsy finding and clinical diagnosis. A comparative study of 1000 cases. Acta Med Scand Suppl, 266,775-81.

O'Neal RM, Lee KT and Edwards DL (1957) Bronchogenic carcinoma. An evaluation from autopsy data, with special reference to incidence, sex ratio, histological type, and accuracy of clinical diagnosis. Cancer, 10,1031-6.

Percy C, Stanek E III and Gloeckler L (1981) Accuracy of cancer death certificates and its effect on cancer mortality statistics. Am J Public Health, 71,242-50.

Pohlen K and Emerson H (1942) Errors in clinical statements of causes of death. Am J Public Health, 32,251-60.

Pohlen K and Emerson H (1943) Errors in clinical statements of causes of death. Am J Public Health, 33,5-4-16.

Rigdon RH and Kirchoff H (1961) Cancer of the lung 1930 to 1960: a review. Texas Reports Biol Med, 19,465-513.

Rigdon RH and Kirchoff H (1963) Vital statistics and the frequency of disease. Tex State J Med, 59,317-24.

Rosenblatt MB, Lisa JR and Trinidad S (1966) Pitfalls in the clinical and histologic diagnosis of bronchogenic carcinoma. Dis Chest, 49,396-404.

Rosenblatt MB, Teng P, Kerpe S and Beck I (1971) Prevalence of lung cancer: Disparity between clinical and autopsy certification. Medical Counterpoint, Oct,53-59.

2028470511

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Rosenblatt MB, Teng P, Kerpe S and Beck I (1971) Causes of death in 1,000 consecutive autopsies. NY State J Med, 71,2189-3.

Royal College of Physicians (1977) Smoking or Health. Royal College of Physicians, London.

Saracci R (1991) Is necropsy a valid monitor of clinical diagnosis performance? Br Med J, 303,898-900.

Sterling TD, Rosenbaum WL and Weinkam JJ (1992) Bias in the attribution of lung cancer as cause of death and its possible consequences for calculating smoking-related risks. Epidemiol, 3,11-6.

Stevanovic G, Tucakovic G, Dotlic R and Kanjuh V (1986) Correlation of clinical diagnoses with autopsy findings: A retrospective study of 2,145 consecutive autopsies. Hum Pathol, 17,1225-30.

Thurlbeck WM (1981) Accuracy of clinical diagnosis in a Canadian teaching hospital. Can Med Assoc J, 125,443-7.

Urano Y, Baba K and Aizawa S (1982) Annual of pathological autopsy cases in Japan. Computarization of autopsy data from 1974 to 1979 and their statistical study. Acta Pathol Jpn, 32,23-46.

Wells HG (1923) Relation of clinical to necropsy diagnosis in cancer and value of existing cancer statistics. JAMA, 80,737-40.

Wells CK and Feinstein AR (1988) Detection bias in diagnostic pursuit of lung cancer. Am J Epidemiol, 128,1016-26.

Wilson RR (1966) In defense of the autopsy. JAMA, 196,1011-2.

World Health Organisation (1992) World Health Statistics Annual 1991, WHO, Geneva.

Papers still to be obtained

Alderson MR (1965) [Thesis]. London University,

Anderson RE, Weston JT et al (1979) The autopsy: past, present and future. JAMA, 242,1056.

Anon. The accuracy and comparability of death certificates. WHO Chron, 21(Jan),11-17.

Bednar B, Liska K et al (1954) Proper, omitted, and erroneous diagnoses, their frequency, and comparison with autopsy findings. Casop l k cesk, 93,345-55.

2028470512

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Bourke GJ and Hall MA (1968) A study of some certified causes of death and age of the certifying doctor. J Irish Med Assoc, 61,115-22.

Briggs RC (1975) Quality of death certificate diagnosis as compared to autopsy findings. Ariz Med, 32,617-9.

Burrows S (1975) The postmortem examination: scientific necessity or folly? JAMA, 233,441-3.

Cabot RC (1912) Diagnostic pitfalls identified during a study of three thousand autopsies. JAMA, 59,2295-8.

Cameron HM, McGoogan E and Watson H (1980) Necropsy: a yardstick for clinical diagnoses. Br Med J, 281,985-8.

Cameron HM and McGoogan E (1981) A prospective study of 1152 hospital autopsies: I. Inaccuracies in death certification. J Pathol, 134,000.

Cameron HM (1981) The autopsy as a clinical investigation. J R Soc Med, 74,713-5.

Carucci PM (1979) Reliability of statistical and medical information reported on birth and death certificates. Monograph No 15. New York State Department of Health,

Clark MA (1981) The value of the hospital autopsy. Am J Forensic Med Pathol, 2,231-7.

Dean G (1969) The need for accurate certification of the cause of death and for more autopsies. J Irish Med Assoc, 62,273-8.

de Faire U, Friberg L, Lorich U and Lundman T (1976) A validation of cause-of-death certification in 1156 deaths. Acta Med Scand, 200,223-8.

Dorn HF and Horn JI (1941) Amer J Hyg, 34,12.

Dorn HF and Cutler SS (1959) Comparison of death certificates and case reports in morbidity from cancer in the United States. Pub Health Mon, 56,117-24.

Ehrlich D, Li-Sik M and Modan B (1975) Some factors affecting the accuracy of cancer diagnosis. Jouurnal of Chronic Diseases, 28,359-64.

Erhardt CL, Weiner L and McAvoy G (1959) Pathological reports for mortality statistics. Journal of the American medical Association, 171,119-22.

Farrell JT (1935) Pulmonary metastasis: a pathologic, clinical, roentgenologic study based on 78 cases seen at necropsy. Radiology, 24,444-51.

2028470513

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Febrick J and Butler NR (1972) Accuracy of registered causes of neonatal deaths in 1958. Br J Prev Soc Med, 26,101-5.

Funk EH (1930) The clinical manifestations of primary bronchial carcinoma. Trans Ass Amer Phycns, 45,86-97.

Gambino SR (1984) The autopsy. The ultimate audit. Arch Pathol Lab Med, 108,444-5.

Gau DW and Diehl AK (1982) Disagreement among general practitioners regarding cause of death. Br Med J, 284,239-41.

Gibinski K, Hartleb M and Koturbasz D (1985) Comparison between pre- and postmortem diagnoses in a consecutive series of patients. Scand J Gastroenterol, 20,370-2.

Gilliam AG, Milmore BK and Lloyd JW (1961) Trends of mortality attributed to carcinoma of the lung. Cancer, 14,622-8.

Goldman L (1984) Diagnostic advances v the value of the autopsy. Arch Pathol Lab Med, 108,501.

Green A and Donald KJ (1976) Necropsy as a control of death certification: some unexpected findings. Med J Aust, 2,131-2.

Griffith GW (1976) Cancer surveillance with particular reference to the uses of mortality data. Int J Epidemiol, 5,69-76.

Haenszel W, Loveland DB and Sirken MG (1962) Lung-cancer mortality as related to residence and smoking histories. 1. White males. JNCI, 28,947-1001.

Hartveit F (1979) Autopsy findings in cases with a clinically uncertain cancer diagnosis. J Path, 129,111.

Hill RB and Anderson RE (1988) The autopsy - medical practice and public policy. 294pp. Butterworths, Boston.

Holler JW and De Morgan NP (1970) A retrospective study of 200 postmortem examinations. J Med Educ, 45,168-70.

Howell TH (1966) Causation of diagnostic errors in octogenarians: a clinico-pathological study. Journal of the American Geriatrics Society, 14,41-7.

Hruby AJ and Sweany HC (1933) Primary carcinoma of the lung with special reference to incidence, early diagnosis and treatment. Arch Int Med, 52,497-540.

Hunter WS (1952) Study of diagnostic errors in clinicopathologic conferences at Massachusetts General Hospital during 25 year period. Permanente Found M Bull, 10,306-9.

2028470514

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Iezzoni LI, Foley SM et al (1992) Comorbidities, complications, and coding bias. Does the number of diagnosis codes matter in predicting in-hospital mortality? JAMA, 264,2197-203.

Jablon S, Angevine DM, Matsumoto YS and Ishida M (1966) On the significance of cause of death as recorded on death certificates in Hiroshima and Nagasaki, Japan. Epidemiological approaches to the study of cancer and other chronic diseases. Monograph No 19,445-65. National Cancer Institute,

Jackson H (1896) Boston Med Surg J, 134,501.

James G, Patton RE and Heslin AS (1955) Accuracy of cause-of-death statements on death certificates. Public Health Rep, 70,39-51.

Joint Working Party of the Royal College of Pathologists, the Royal College of Physicians of London and the Royal College of Surgeons of England (1991) The Autopsy and Audit. 24pp. The Royal College of Pathologists, London.

Justin-Besancon L, Chretien J and Delavierre P (1963) Bilan de 1000 confrontations anatomocliniques recentes [Communication]. Bull Acad Nat Med (Paris), 147,330.

Kastenbaum MA (1982) Interpreting vital statistics. The implications of diagnostic and certification errors. Seminar handout. 21-35. Department of Statistics, SUNY, Buffalo, New York,

Kastenbaum MA (1983) Interpreting vital statistics: implications of errors in the data base. Contributed paper, 44th Session of the International Statistical Institute. 1-4.

Kastenbaum MA (1984) Diagnostic errors and their impact on disease trends. In: Gelfand AE (ed) Contributions to the Theory and Applications of Statistics. (Draft). 1-26. Academic Press,

King DS and Castleman B (1943) Bronchial involvement in metastatic pulmonary malignancy. J Thorac Surg, 12,305-15.

Kunitz SJ and Edland JF (1973) The epidemiology of autopsies in Monroe County, New York. Journal of Forensic Sciences, 18,370-9.

Landefeld CS, Chren M-M et al (1988) Diagnostic yield of the autopsy in a university hospital and a community hospital. N Engl J Med, 318,1249-54.

Lombard HL, Huyck EP and Snegireff LS (1962) An appraisal of the cancer death record. Proceedings of the National Academy of Sciences of the United States of America, 48,2059-62.

MacDonald EJ (1938) Amer J Publ Hlth, 28,818.

2028470515

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Markush RE, Schaaf WE and Seigel DG (1967) The influence of the death certifier on the results of epidemiologic studies. Journal of the National Medical Association, 59,105-13.

Marshall TK (1970) The value of the necropsy in ascertaining the true cause of a non-criminal death. Journal of Forensic Sciences, 15,28-33.

McPhee SJ and Bottles K (1985) Autopsy: moribund art or vital science? Am J Med, 78,107.

Michalek AM and Cummings KM (1987) The association between cigarette smoking and age at cancer diagnosis. Hum Biol, 59,631-9.

Mitchell RS, Maisel JC, Dart GA and Silvers GW (1971) The accuracy of the death certificate in reporting cause of death in adults: With special reference to chronic bronchitis and emphysema. Am Rev Respir Dis, 104,844-50.

Moriyama IM, Baum WS, Haenszel WM and Mattison BF (1958) Amer J Publ Hlth, 48,1376-87.

Morris JN (1964) Uses of Epidemiology [2nd edition]. Livingstone, London.

Munck W (1952) Autopsy finding and clinical diagnosis. A comparative study of 1000 cases. Acta Med Scand, Suppl 266,775.

Nash I (1986) The autopsy as a measure of accuracy of the death certificate. N Engl J Med, 314,1259.

Onuigbo WIB (1971) The diagnosis of lung cancer in the 19th century. British Journal of Disease of the Chest, 69,119-24.

Peery TM (1940) Evaluation of the apparently increased incidence of primary carcinoma of the lung. Arch Path, 29,625-32.

Perrone JA (1964) One thousand cases of lung cancer. Pennsylvania Medical Journal, 67,31-4.

Prutting J (1967) Lack of correlation between antemortem and postmortem diagnoses. NY State J Med, 67,2081-4.

Puffer RR and Griffith GW (1967) Patterns of urban mortality. 90. Pan American Health Organization, WHO,

Reid DD and Rose GA (1964) Assessing the comparability of mortality statistics. Br Med J, 2,1437-9.

Reid WA, Harkin PJR and Jack AS (1987) Continual audit of clinical diagnostic accuracy by computer: a study of 592 autopsy cases. J Pathol, 153,99-107.

2028470516

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Rigdon RH and Kirchoff H (1952) A consideration of some of the theories relative to the etiology and incidence of lung cancer. Tex Rep Biol Med, 10,76-91.

Rigdon RH and Kirchoff H (1958) Cancer of the lung from 1900 to 1930. Surg Gyn Obst, 107,105-18.

Roe FJC (1992) Let's have a post-mortem. Indoor Environ, 1,179-81.

Sandritter W, Staeudinger M and Drexler H (1980) Autopsy and clinical diagnosis. Path Res Pract, 168,107-14.

Schottenfeld D, Eaton M et al (1982) The autopsy as a measure of accuracy of the death certificate. Bull N Y Acad Med, 58,778-94.

Schwartz CJ (1977) The Hawaii mortality follow-back study: 2. An evaluation of medical certification of the cause of death through the use of hospital discharge diagnoses. R and S report issue no 17. Hawaii State Department Research and Statistics Office,

Silverberg SG (1984) The autopsy and cancer. Arch Pathol Lab Med, 108,476-8.

Steer A, Moriyama IM and Shimizu K (1973) The autopsy program and the life span study, Jan 1951-Dec 1970 ABCC-JNIH Pathology Studies, Hiroshima and Nagasaki. Report 3, Technical Report 16-73.

Steer A, Land CE et al (1976) Accuracy of diagnosis of cancer among autopsy cases: JNIH-ABCC population for Hiroshima and Nagasaki. Gann, 67,625-32.

Steinitz R and Costin C (1971) Cancer mortality - vital statistics versus cancer registry. Israel Journal of Medical Sciences, 7,1405-12.

Swartout HO (1934) New Engl J Med, 211,539.

Swartout HO and Webster RG (1940) To what degree are mortality statistics dependable? Amer J Publ Hlth, 30,811.

Takeda K and Kobayashy H (1967) Reliability of cancer diagnosis in Japan. Gann, 58,139-46.

Virkkunen M, Penttilä A et al (1975) Comparative study on the underlying cause and mode of death established prior to and after medicolegal autopsy. Forensic Science, 5,73-9.

Waald E and Grimstvedt M (1958) The clinical diagnoses of of the causes of death and their reliability. Acta Pathol Microbiol Scand, 43,330-8.

Waldron HA and Vickerstaff L (1977) Intimations of quality. Nuffield Provincial Hospitals Trust, London.

2028470517

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000

Wallgren I (1945) Findings at autopsy and the clinical diagnosis. Nord Med, 26,1311-6.

Wells CK and Feinstein AR (1992) Cigarette smoking, detection bias, and age at diagnosis of lung cancer[Abstract]. Clin Res, 40,234A.

Wheeler MS (1982) One resident's view of the autopsy. Arch Pathol Lab Med, 106,311-3.

Willis RA (1967) Pathology of Tumors [Ed 4]. 67-91. Butterworth & Co Ltd, London.

2028470518

Source: https://www.industrydocuments.ucsf.edu/docs/mscl0000